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July 26, 2007

Agenda

The Opportunity

Asset Light

Manufacturing Operations

Process Technology

Fab versus Foundry

Summary

Market Trends

The Role of Manufacturing and Technology



Energy-
Efficient
Processing

Transistor-level innovation

Optimal performance per-watt-per-square mm



Ultimate
Visual
Experience

Agile foundry capabilities

Seamless design/process tech collaboration



Affordable
Internet
Access

Low cost, low power processors

Highly integrated design

Manufacturing at the “New AMD”

Diverse product set

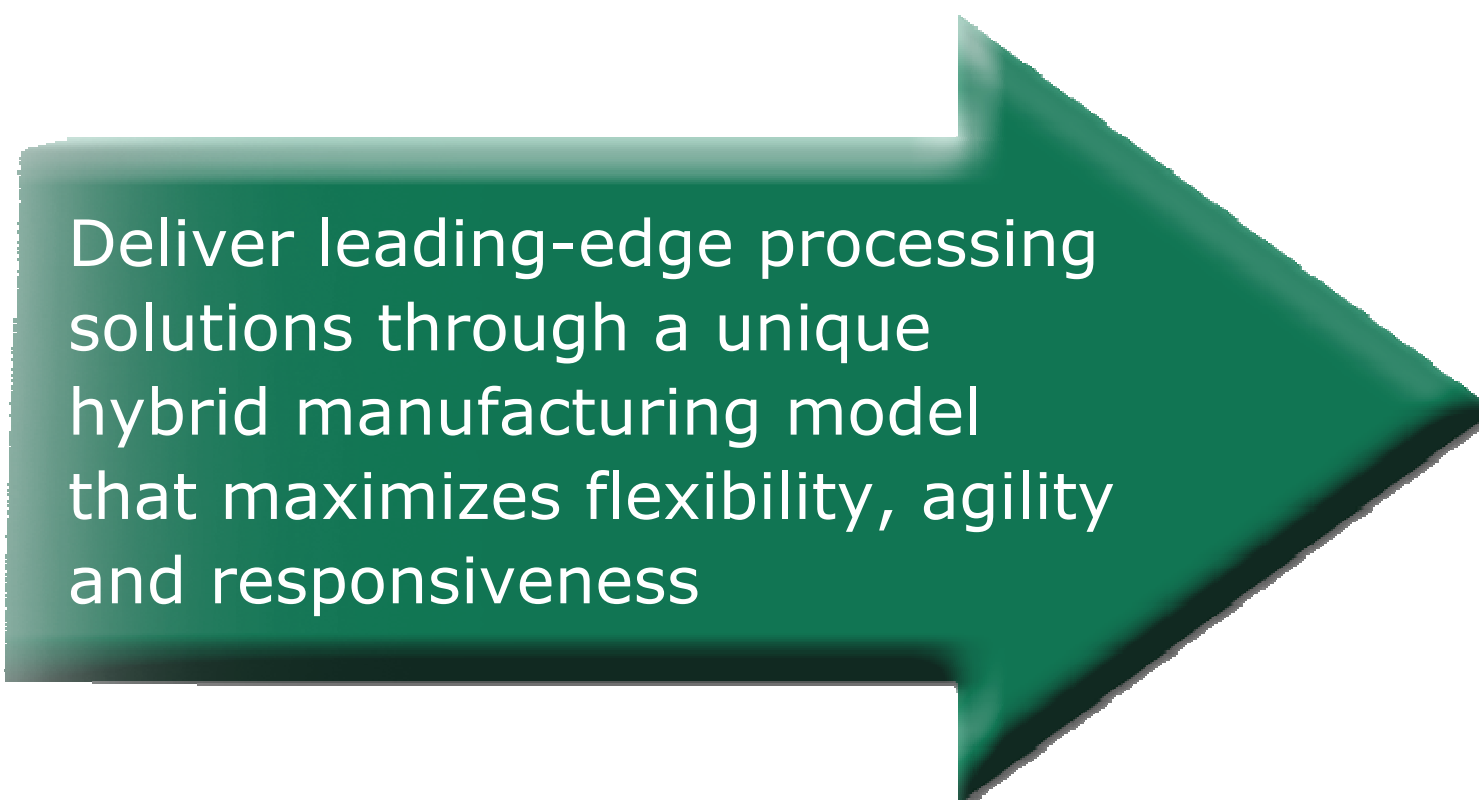
- CPU, GPU, chipset & SoC
- Bulk and SOI performance and value segments
- Varying product lifecycles and clients

Increased resources to leverage

- AMD-owned fabs and back-end operations
- Foundry partners
- Outsourced Assembly & Test
- Technology development alliances



The Opportunity



Deliver leading-edge processing solutions through a unique hybrid manufacturing model that maximizes flexibility, agility and responsiveness

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Asset Light

Innovation and Cost Efficiency



Asset Light is...

Incorporation of AMD and ATI resources into a collective global view

Optimization of AMD's global network of internal and external operations

Utilization of existing assets to their fullest extent to maximize ROI

Asset Light is not...

Moving to a fabless manufacturing model

Asset Light

Customer Centric Operations



Asset Light is at work today

- Early stage R&D: IBM partnership
- **FlexFab** Production: Chartered, TSMC, UMC
- Assembly and Test: Amkor, ASE, STATS, SPIL

Asset Light is evolving

- Building increased flexibility into AMD production
- Further insulating against demand fluctuations

Asset Light Today: Nanoscale R&D

AMD/IBM Development Alliance



Shared objective

- Production-ready high performance microprocessor technologies

Shared investment

- Early-stage research and development through 22nm generation
- AMD on-site team has grown from 15 to 70 since 2002

Shared return

- Current generations: 90nm and 65nm
 - High-performance, power-efficient SOI technology
- Next generations: 45nm and 32nm
 - Continued performance-per-watt leadership
 - Immersion Lithography, Ultra-low-k and high-k / metal gate



Asset Light Today: FlexFab Production

AMD & Chartered Semiconductor



Shared objective

- High-yield, foundry production of AMD microprocessors

Shared investment

- Early-stage APM license for fab automation
- Dedicated onsite engineering resources

Shared return

- "Flex" production of 90nm MPU products
- Increased capacity and efficiency at Chartered Fab 7
- Rapid 65nm technology transition planned for 2H 2007



Asset Light Today: FlexFab Production

AMD & TSMC



Shared objective

- High-performance graphics/chipset/SoC production on leading edge bulk technology

Shared investment

- Collaboration between design teams to maximize yield on leading-edge process nodes

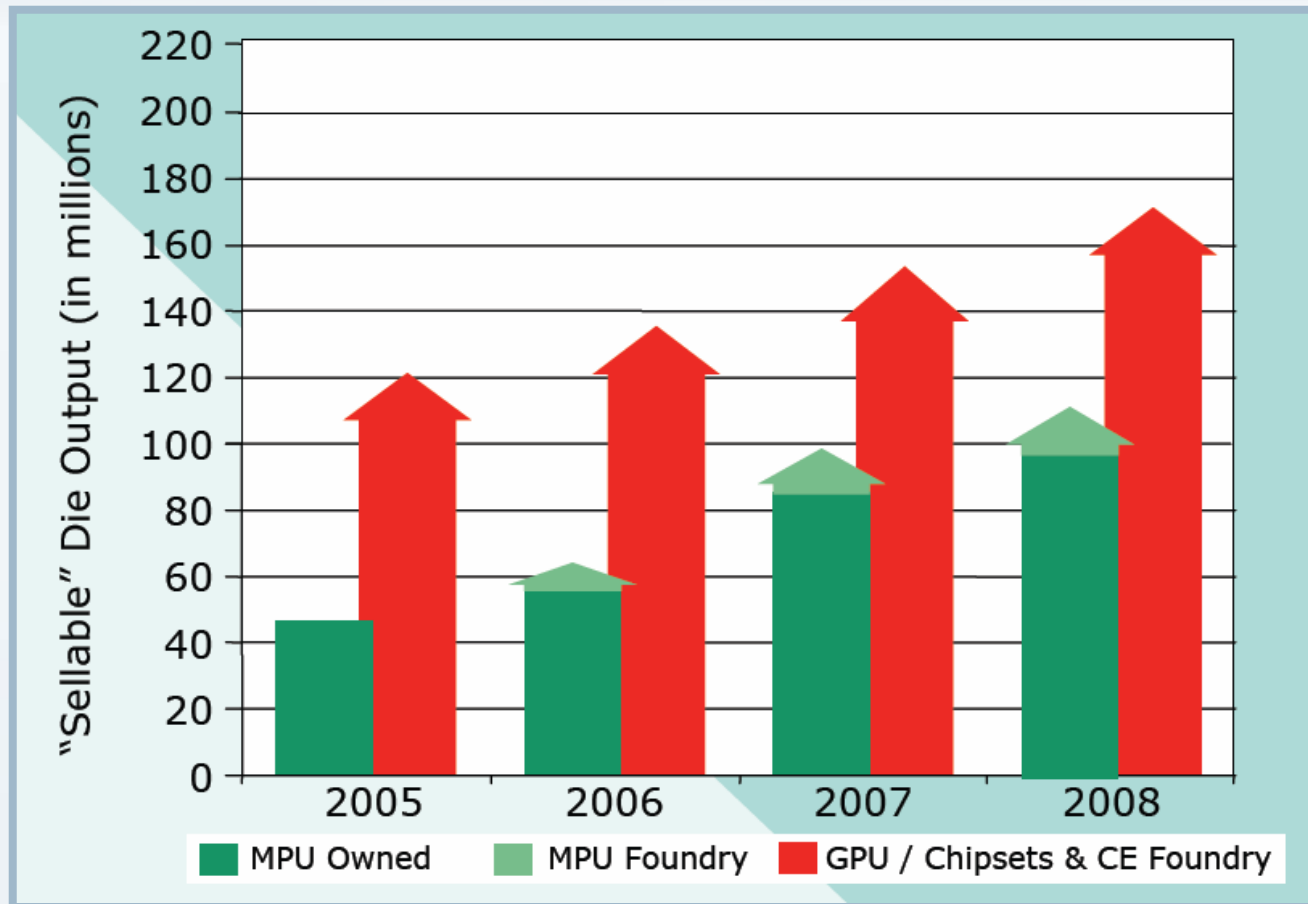
Shared return

- 2 million wafers shipped (Q2 07)
- Maximum yields on premium products
- Expanded GPU production at 65nm
- 55nm planned in Q4 2007



Asset Light

"Flex" Capacity



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AMD Dresden: Fab 30

Setting the standard for CPU production



Exceeded original capacity plans by 50%

200mm production ramping down in 2H 2007

AMD Dresden: Fab 36

Continuing the legacy of excellence



Fully converted to 65nm production

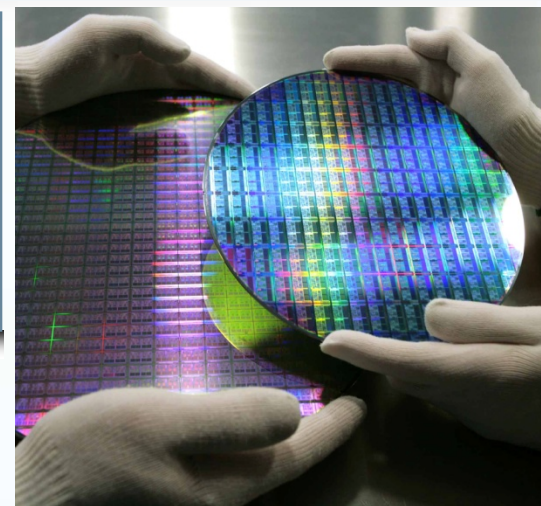
45nm pilot lines now running

Lean principles and Automated Precision Manufacturing

Aligning Capacity with Demand

Fab 36 at peak 300mm efficiency

- Lead Fab for technology and products
- Solid experience and skill set to support fast and smooth ramp up of Fab 38



Fab 38 transformation

- Adds flexible capacity to Fab 36 during 2008 and 1H 2009
- Process technology from 65 nm to 32 nm and beyond
- Optimized capital costs for 2007 / 2008

CPU Manufacturing: Powered by APM

Speed, accuracy and agility in action

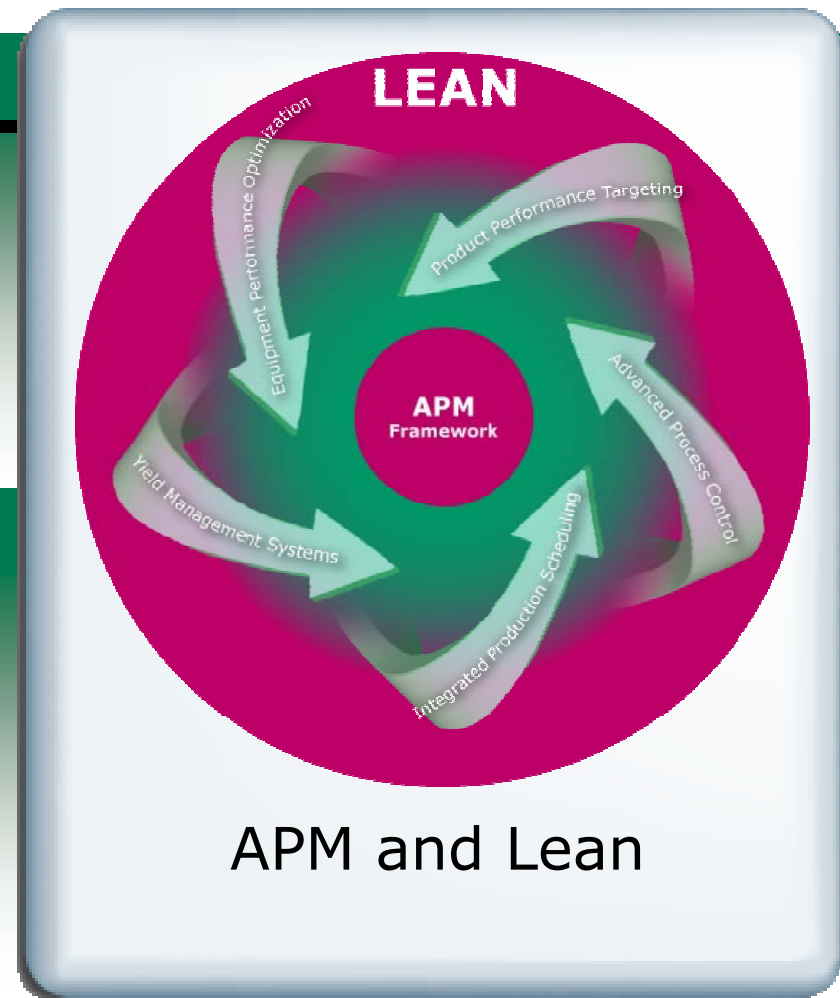


AMD Fab 36

- Rapid time to mature yield
- Accelerated 65nm conversion
- Best-in-class cycle times

Chartered Fab 7

- Implemented in record time
- Increased capacity of Fab 7
- Reduced operational costs



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Asset Light

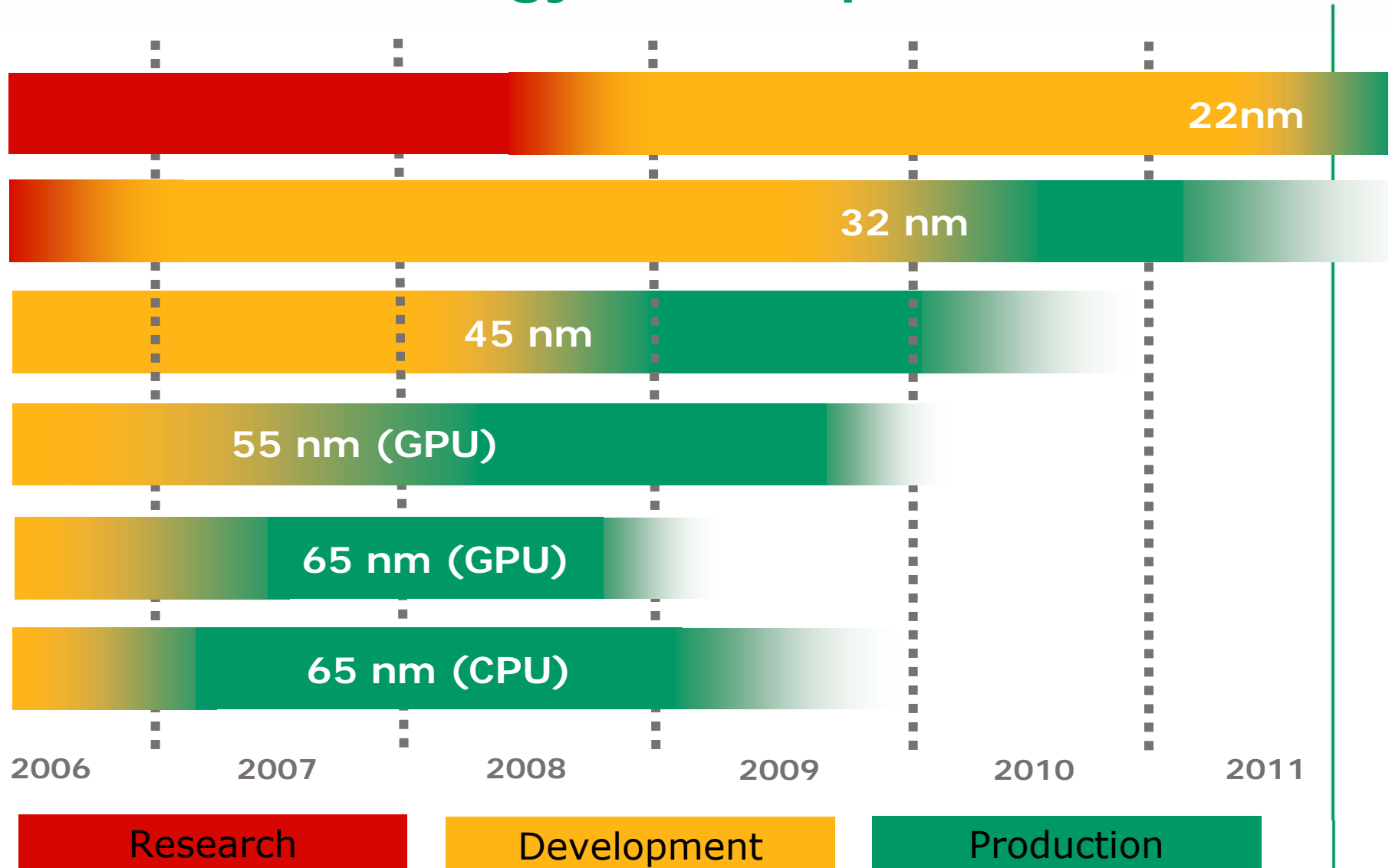
Manufacturing Operations

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Process Technology Roadmap



Process Technology Scorecard

AMD continues to execute on-plan



65nm

Shipped to customers in Q4 06



Ramped at mature yields



Mid-2007 Fab 36 conversion



45nm

Immersion lithography online



Production Mid-2008

On schedule



Ramp at mature yields

On schedule



AMD & 65nm

A Case Study in Speed, Accuracy and Agility

Jointly Developed

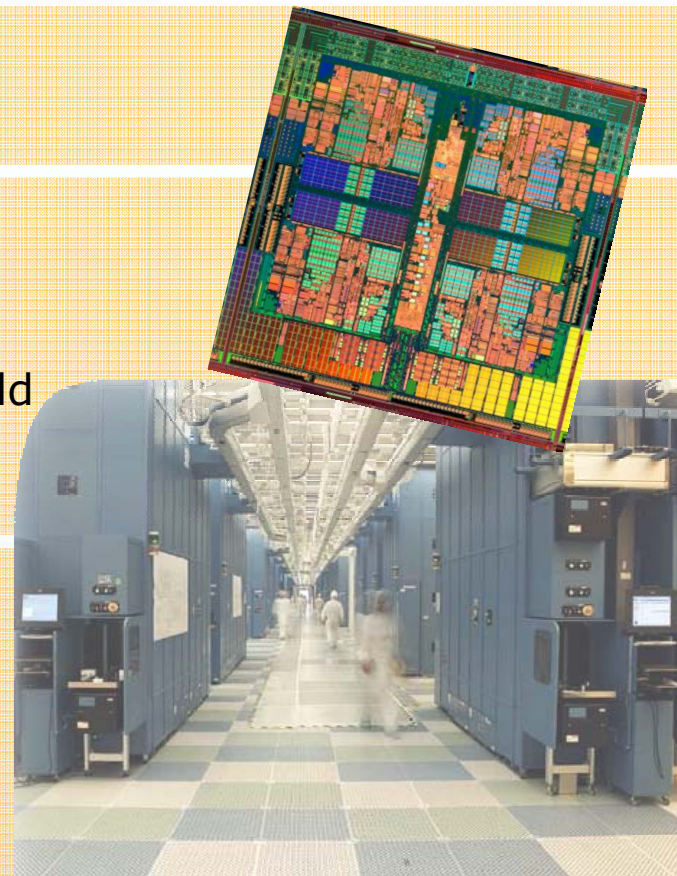
- Jointly developed by IBM and AMD

Rapidly Ramped

- Faster than 90nm
- 1000 wafer starts to reach mature yield
- Defect densities below 0.5cm² range

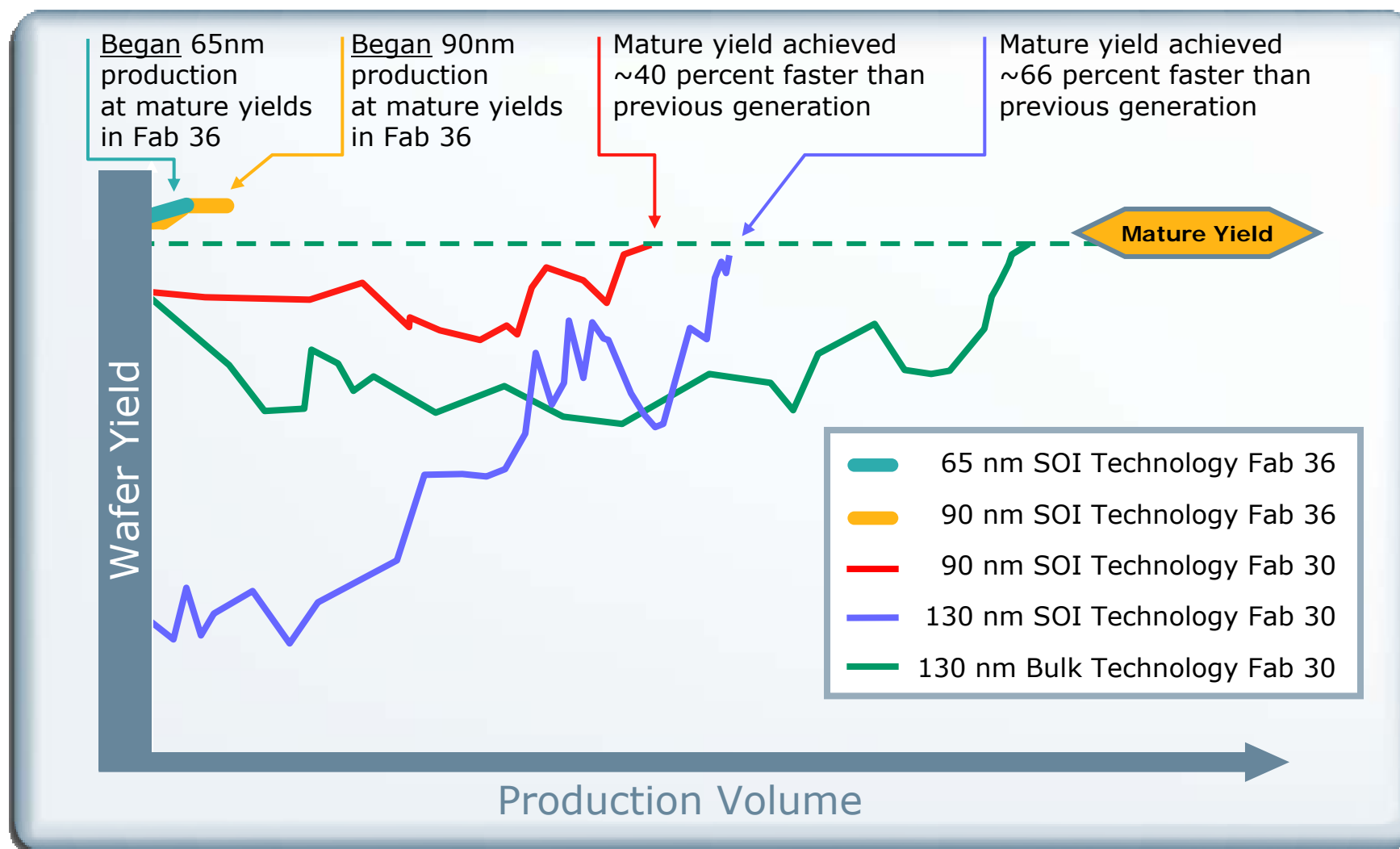
Successfully Delivered

- All client products now in production at 65nm
- Successfully ramping quad core for delivery in Q307

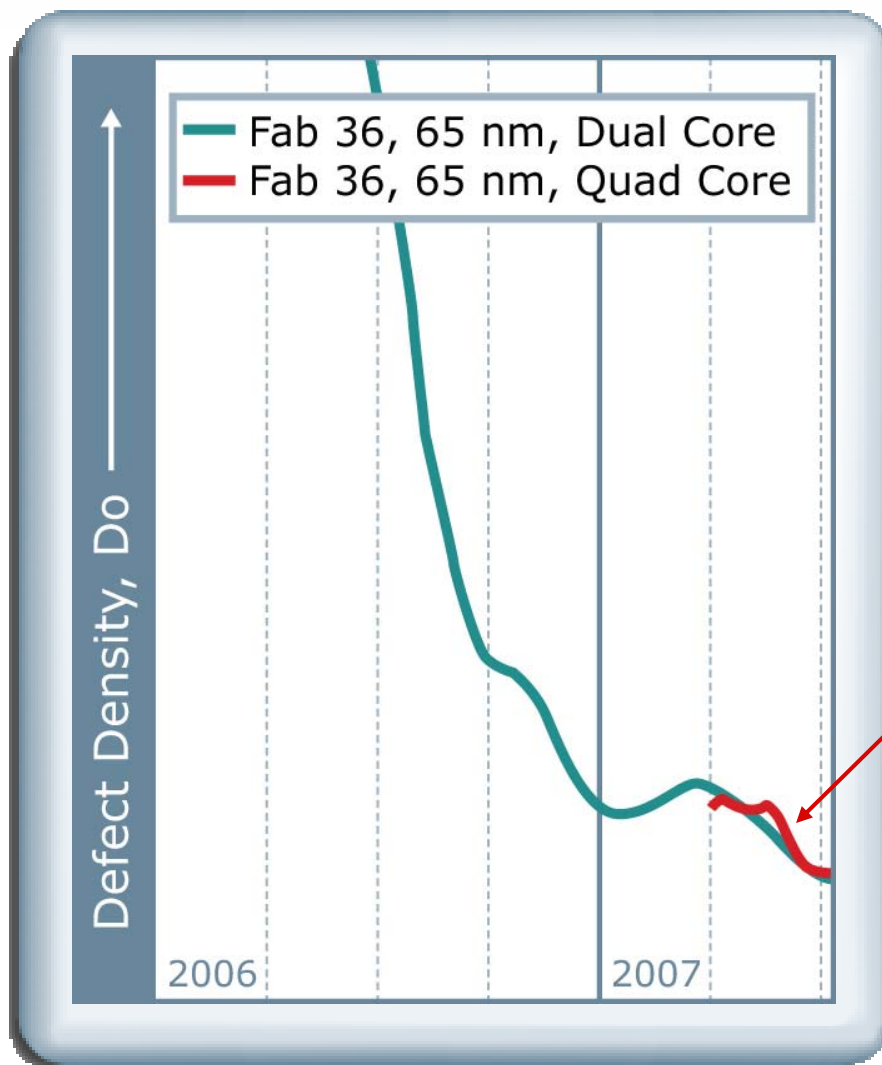


AMD & 65nm

Record time to mature yield



Barcelona Quad Core Yields



Barcelona yields in line with dual core mass production results

Initial Barcelona native quad core production yield data

AMD & 45nm

Fueling continued design innovation

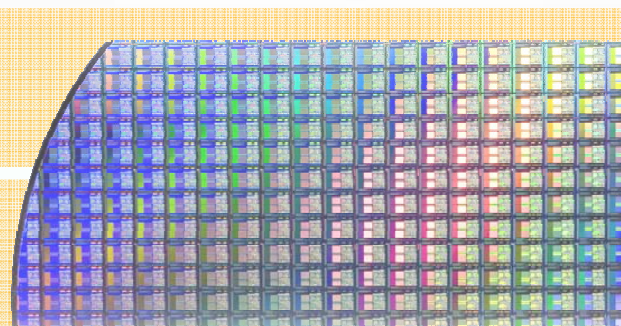


Jointly Developed

- Jointly developed by IBM and AMD

Production Efficiency

- Ramped Immersion lithography
 - Addresses unique needs of finer geometry
 - Eliminates need for double exposures to reduce cost and complexity



Performance and Power Efficiency

- 20% performance improvement from strained silicon and ultra-low-K dielectrics
- Ability to further enhance characteristics with High-k / Metal Gate devices
 - Dramatically reduces leakage current and allows device scaling to resume

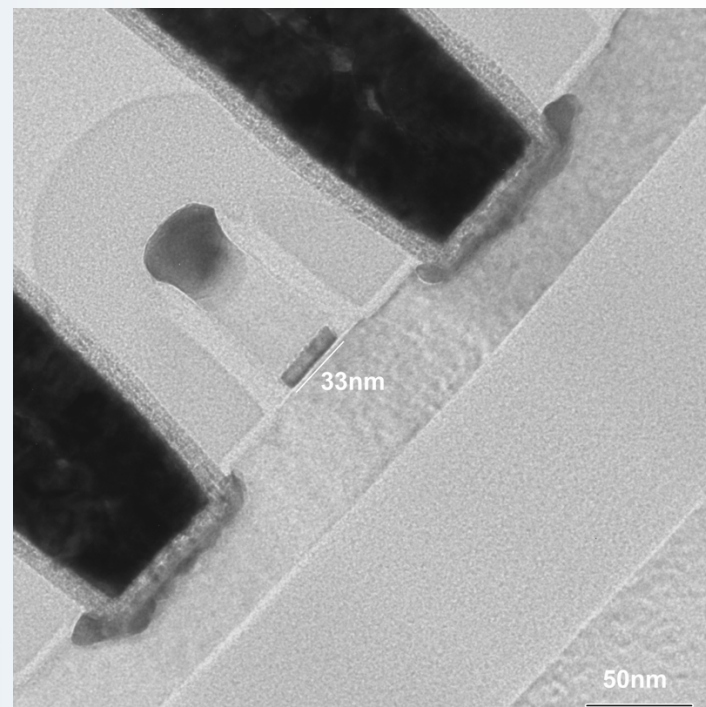
AMD & High-k/Metal Gate Transistors

Realizing the full potential



AMD's High-k/Metal Gate advantage

- Uses traditional processing:
 - Minimizes complexity and cost
 - consistent with current technology
 - Reduces capacitance for lower power and improved performance over other approaches
 - Improves device performance through mobility enhancement
 - Planned for 2nd Gen 45nm and/or 1st Gen 32nm technology generations



AMD & 32nm Technology

High-k/Metal Gate transistor technology for scaling

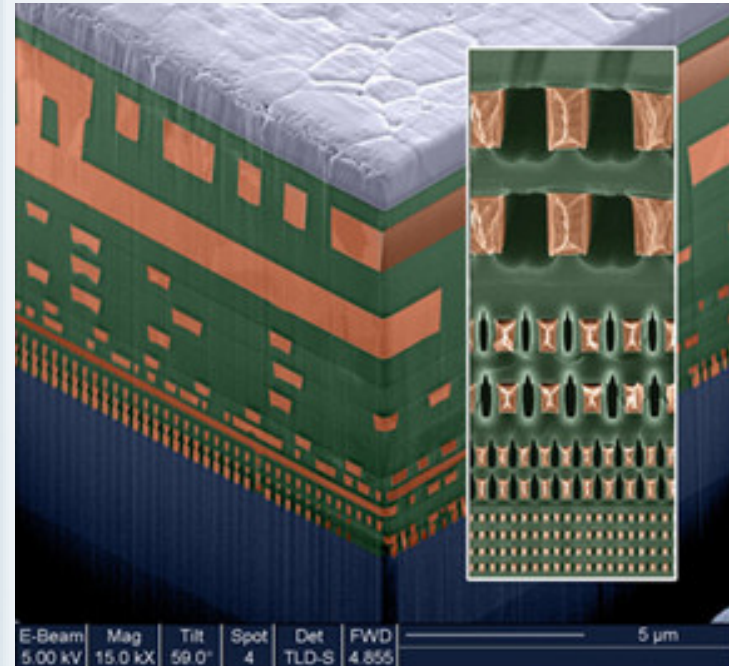
Combined Ultra-low-k and Vacuum Air-Gap technology

- A product of the expanded research partnership with IBM
- Greater than 30% reduction in BEOL capacitance
- Anticipated 10% improvement in chip speed and 10% decrease in energy consumption

Extending leadership in immersion lithography

SRAM cell scales ~40% from 45nm

Planned 2010 shipments to customers



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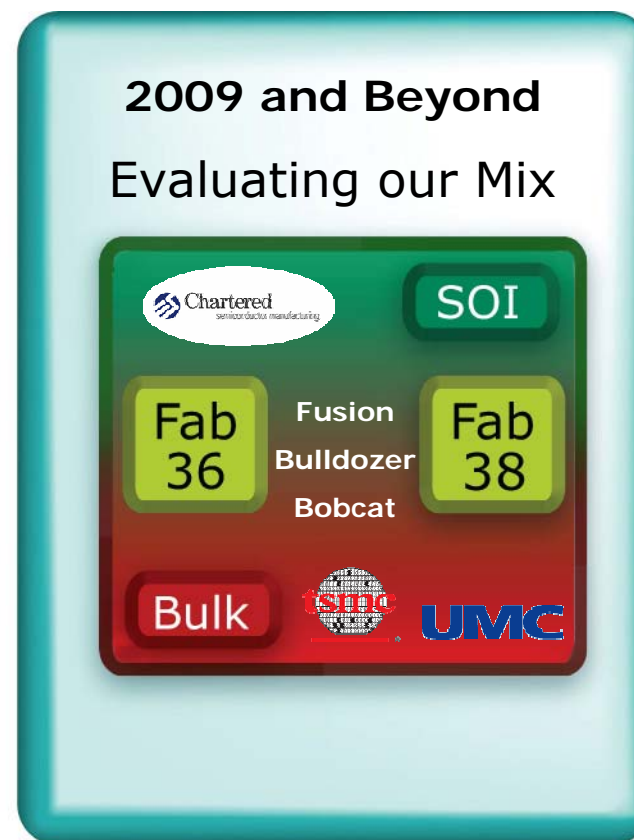
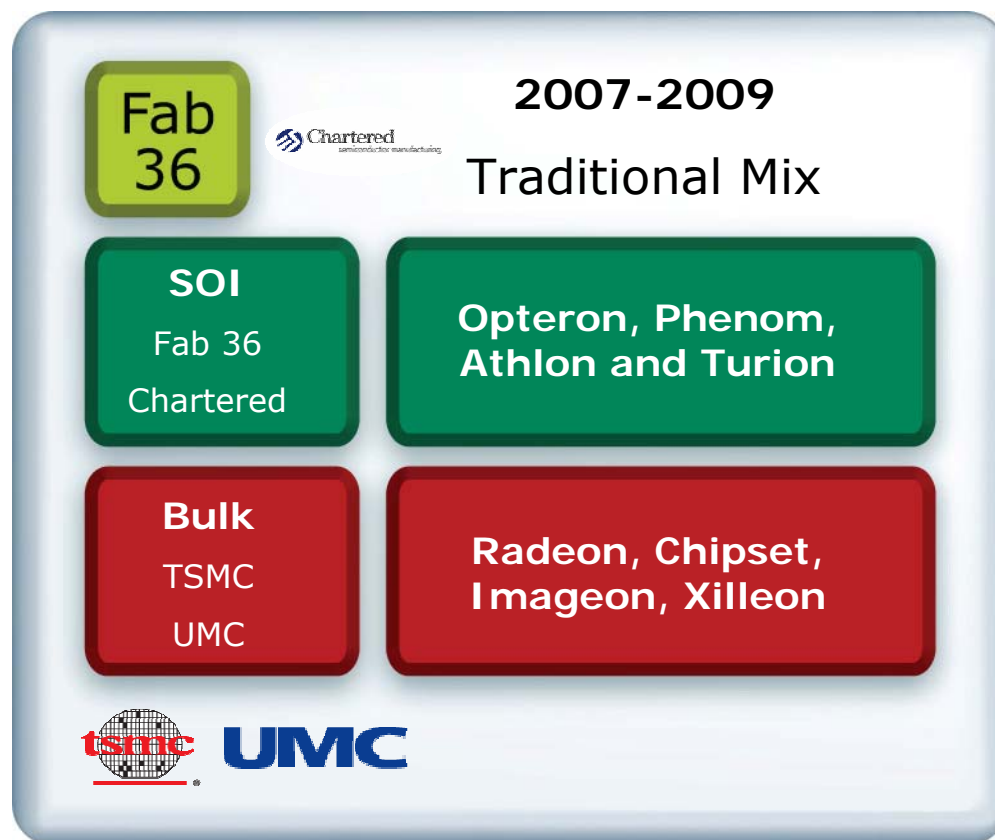
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Achieving the right balance



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In Summary

Advancing our Asset Light Strategy. For competitive reasons, we are not sharing details of progress at this point, we will do so as soon as its appropriate.

AMD continues to execute on-plan process technology transitions

Speed, accuracy and agility continues to be the foundation of AMD manufacturing



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